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ABSTRACT

It is stated that the social science curriculum for gifted junior high school students can be enriched by drawing from psychology, sociology, and anthropology. An overview of instruction in the social sciences includes specification of subject matter emphases in grades 7-9, definition of major goals (process, personal, and situational goals) in social sciences, and consideration of the requirements for a successful program (small classes, exciting topics, reasonable grading, cultural exposure, communication with parents, variety). Conduct of research projects at each of the three grade levels is discussed, and five steps involved in carrying out a research project are outlined. Provided are some sample applications of research skills, in which the method used is to begin inductively and end deductively, and some sample stimulus questions or discussion starters concerning language drawn primarily from the fields of psychology and sociology. Finally the field-study method as a means of developing creativity is presented, and numerous provocative topics for interviews or classroom study are listed. The appended list of suggested books for students includes nonfiction, fiction, biography, and reference works. (KW)

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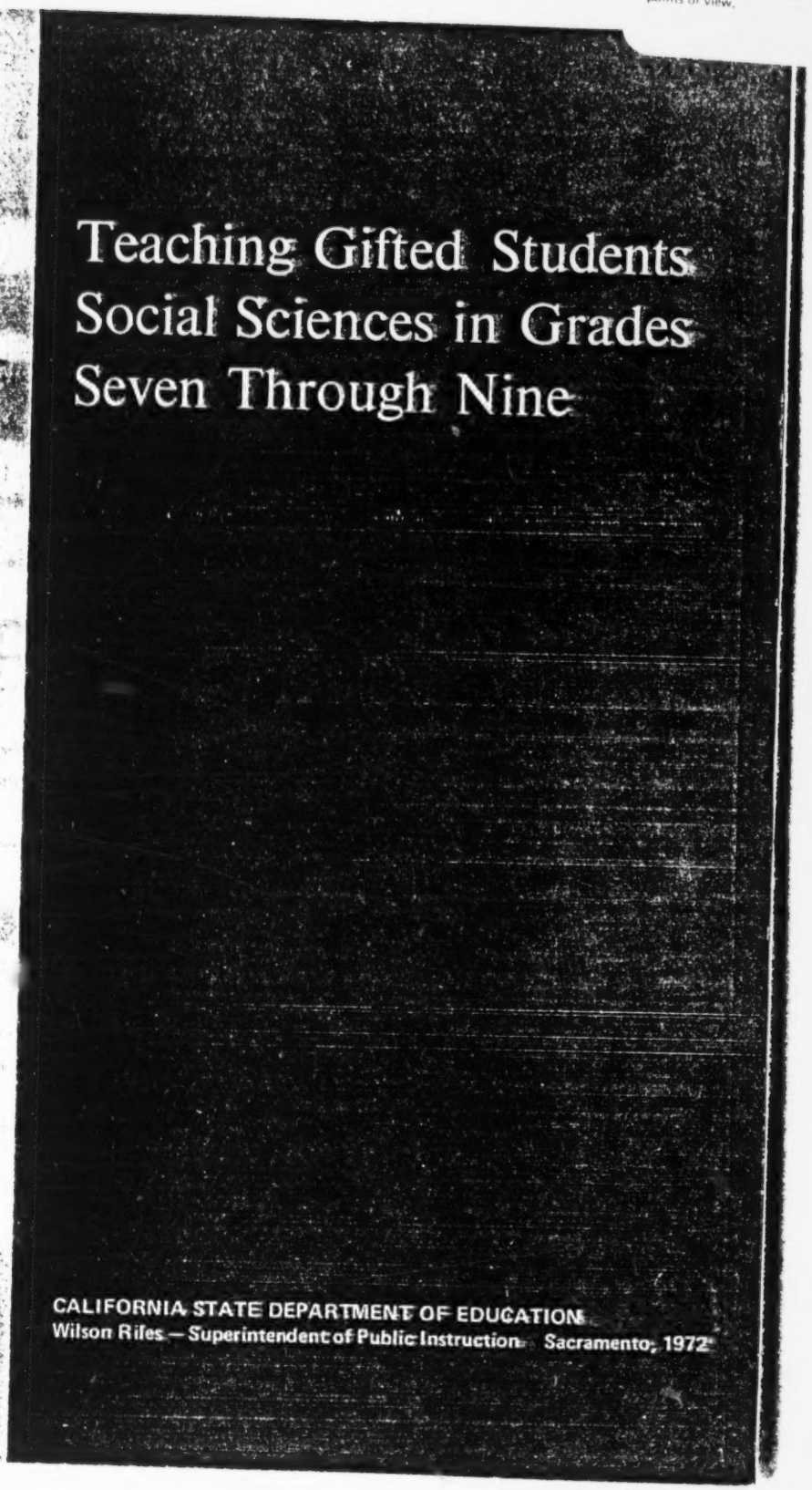
Teaching Gifted Students
Social Sciences in Grades
Seven Through Nine
CALIFORNIA STATE DEPARTMENT OF EDUCATION
Wilson Riles — Superintendent of Public Instruction Sacramento, 1972

EC 050 878

Teaching Gifted Students Social Sciences in Grades Seven Through Nine

Prepared for the

DIVISION OF SPECIAL EDUCATION
California State Department of Education

By

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U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
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FOREWORD

Mentally gifted students require a large share of the teacher's time and talents, even though they comprise only a small part of the student population. Gifted students can move through an ordinary curriculum with ease; therefore, to challenge them successfully, the teacher must utilize many resources.

Many of the gifted students will become eminent leaders of education, industry, and government. If their special educational needs are not met, the gifted will become frustrated, and their frustration can prevent their reaching constructive goals. If this happens, both the state and the nation will suffer a great loss.

The teacher can best serve the mentally gifted by shaping the curriculum to their needs and by varying the manner and rate of teaching the subject. This will win and hold the students' interest.

The State Department of Education has conducted a project to develop appropriate curriculum materials. This publication is one in a series from that project. This series of publications will contain important concepts and suggestions for teaching the mentally gifted.

It is my hope and belief that these publications designed for the mentally gifted will be most useful to both mentally gifted students and the teachers who instruct them.

Superintendent of Public Instruction

PREFACE

This publication, one in a series authorized and funded under provisions of the Elementary and Secondary Education Act, Title V, is intended for use by teachers, consultants, and administrators involved in programs for mentally gifted minors. As defined in the Education Code, a mentally gifted minor is a student with such general intellectual capacity as to be placed within the top 2 percent of all students enrolled at his grade level in California schools.

The readers of this publication should refer to another important publication of the Department of Education – *Principles, Objectives, and Curricula for Programs in the Education of Mentally Gifted Minors: Kindergarten Through Grade Twelve.* That preliminary document complements the material contained here. Both the series of publications for teachers, consultants, and administrators and the preliminary document were developed under the direction of Mary N. Meeker and James F. Magary of the University of Southern California.

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CONTENTS

Foreword iii
Preface v

Chapter 1 Overview of Instruction in the Social Sciences . . . 1
Psychology, Sociology, Anthropology 1
Parameters of the Social Sciences 2
Goals in the Social Sciences 2
Requirements for Successful Program 3

Chapter 2 Process of Scientific Research 6
Seventh Grade 6
Eighth Grade 6
Ninth Grade 6
Steps in Successful Research 7
Communication of Research Hypotheses 11
Sample Questions 11
Use of Film Preview Techniques 12

Chapter 3 Applications of Research Skills 13
Anthropology: Inductive Method 13
Anthropology: Deductive Method 15
Psychology and Sociology 16
Octogeny and Phylogeny 16

Chapter 4 Development of Creativity: Field-Study Method . . 22
Topics for Interviews 22
Topics for the Classroom 23

Selected References 33

Chapter 1

Overview of Instruction in the Social Sciences

No subject area lends itself more to the education of mentally gifted minors than does the study of the social sciences. Webster's *Third New International Dictionary* defines *social science* as (1) "the branches of science that deal with the institutions and functioning of human society and with the interpersonal relationships of individuals as members of society"; and (2) "a science (as economics or political science) dealing with a particular phase or aspect of human society."

Donald Popham describes the social sciences as follows:

> The social sciences may be described as those organized bodies of knowledge built up from the formal, scholarly, and advanced studies that deal with human beings and their interrelationships. These sciences are concerned with the detailed, systematic, and theoretical study of human relationships. They provide a perspective within which these relationships may be described, classified, and explained.
>
> . . . Cultural anthropology is the study of the customs, folklore, social activities, and organizations resulting from man's reaction to his environment. . . . Sociology is the study of the forms, institutions, and functions of human groups.[1]

Psychology, Sociology, Anthropology

Another subject that falls within the discipline of the social sciences is psychology. A behavioral science straddling the disciplines of the natural sciences and the social sciences, psychology is usually defined as "the study of human behavior."

The junior high school can provide a basis for enriching the social science curriculum for the gifted by drawing from psychology, sociology, and anthropology. These disciplines and the overlap between them establish the subject matter that makes up the course of study; it is often difficult, however, to determine where one ends and the other begins. Each segment has its own exclusive body of knowledge, but for the gifted at this level, the boundary lines are erased.

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[1] *Teaching Gifted Students Social Sciences in Grades Ten Through Twelve.* Prepared by Donald F. Popham. Sacramento: California State Department of Education, 1971.

Parameters of the Social Sciences

If an individual is to understand where he fits into the scheme of things and if he is to build a hierarchy of values for himself and for the world in which he must exist, he needs a background of understanding and a basis for making comparisons so that he can make ethical judgments. With the gifted, even in a junior high school situation, an opportunity exists to accomplish, to a limited extent, both of these objectives.

Phenix Hierarchy

This publication presents subject matter that can be divided into separate sections for the seventh, eighth, and ninth grades. The organization used for parameters is taken from Phenix's hierarchy.[2] Seventh grade should have most emphasis on psychology (Who am I?), less emphasis on sociology (What is society?), and least emphasis on anthropology (Where have we been and where are we now?). In the eighth grade the emphasis should shift to sociology, with psychology and anthropology taking lesser roles. And in the ninth grade, anthropology should take the spotlight, with sociology being second in importance and psychology last.

Importance of Good Conduct

Much more goes on in the classroom than meets the eye of the casual visitor. The student must master subject matter, but he must also be punctual, cooperative, reliable, accurate, and neat. These and a host of other virtues that support harmonious relationships must be practiced by the successful student. The science teacher who said that science was the least important thing he taught was being realistic. He knew from experience that group endeavor is successful if behavior traits are adequately developed.

Goals in the Social Sciences

The major goals in social sciences include the development of human potential within three divisions – process, personal, and situational.

Process Goals

1. The student becomes aware of the processes involved in learning, and he begins to see the reasons for specific assignments.
2. He is able to communicate abstract and complex ideas b breaking them down to their component parts and finding the underlying assumptions.
3. He is not compelled to go through a predetermined number o stages but is allowed to bypass any stage that seems unnecessar for him.
4. He analyzes complex theories, ideas, and concepts. When h encounters instances of cloudy thinking, he recognizes the (for example, stereotypes, the desire to believe, failure to defin terms, lack of consideration of all the data, the mistaking o correlation for causation).
5. He is aware of generalizations that are too broad (for exampl words like *always, never, all, everyone,* and *no one*).
6. He supports his own generalizations with specific data.
7. He learns to evaluate the reliability of his sources.

Personal Goals

1. The student learns independently and is able to recognize ar use organizational schemata and structures.
2. He becomes an effective questioner.
3. He shares information when involved in a group situation.
4. He is able to take discrete ideas, thoughts, and generalizatio and weave them into meaningful patterns.
5. He expresses intellectual curiosity and seeks means to satisfy i
6. He learns to disagree courteously and accepts and profits fro constructive criticism.
7. He evaluates his strengths and weaknesses realistically.
8. He and the teacher cultivate honest and direct communicatio

Situational Goals

1. The student uses various media to express his own ideas.
2. He makes full use of his environmental sources as aids problem solving.
3. He works in an environment that allows him to use h intellectual curiosity. The teacher does not impose his person value judgments upon the student.

Requirements for Successful Program

The attitude of most junior high school students is expressed the words "I dare you to teach me something; better people tha you have tried." This attitude makes these students difficult to teac and the gifted in the group present a particular challenge.

Since the junior high school student has several years of stud ahead of him, he must be helped to form positive attitudes towa

[2]See *Principles, Objectives, and Curricula for Programs in the Education of Mentally Gifted Minors: Kindergarten Through Grade Twelve.* Sacramento: California State Department of Education, 1971, pp. 19-20.

intellectual inquiry. As he enters the tenth grade, he should be someone who reflects the balance and breadth of curriculum for the gifted. This objective cannot be achieved unless certain administrative procedures are followed.

Small Classes

The ideal number of students in a social science class is about 20, and the enrollment should never exceed 25. In the Long Beach Unified School District, teachers utilize the subgroup method in anthropology classes at the ninth-grade level. Each class is divided into two equal groups. These groups meet on alternate days; the entire class meets only on Fridays. The limitation of subgroups to about ten students each allows the teachers to conduct seminar-style meetings. These meetings contribute to (1) the development of process, personal, and situational goals; and (2) the achievement of those goals.

Exciting Topics

The teacher should encourage students to learn as much as possible by participating in discussions of exciting topics. The teacher removes drill and rote learning from the classroom.

Reasonable Grading

The mentally gifted represent the top 2 percent of the student population. Letter grades should, therefore, be composed mostly of A's with a few B's. (In average classes nearly all gifted students would receive A's.) It is appalling to learn of high school teachers who grade gifted students in honors classes on a curve. A bell-shaped curve is a graphic way of demonstrating that if the nearly four billion people of the world were tested for intelligence, about 68 percent would be found to be average and would receive C grades if in class; about 16 percent would be found above and below the average and would receive B and D grades if in class; and the 2 percent left would represent the A and F categories.

A teacher who grades on the curve assumes that he has a representative cross section of students seated before him in the classroom. But a class for gifted and nearly gifted students would contain the top 2 percent of the student population together with representatives from the next 16 percent. These are the A and B students. The teacher of the gifted should, therefore, continually review his grading practices to make sure that he is treating each of his students fairly.

Cultural Exposure

Teachers should take their students to see and hear significan examples of culture and should bring culture to the students Students should be able to hear speakers from the faculty, th business world, and community professions. When speakers relat what they do in their vocations, the students listen well, gai knowledge, and are more interested. Teachers should take student to local museums, places of historical interest, colleges, universities and vocational schools. Each trip will generate discussions pertinen to the study of the social sciences. For example, a trip to a farm ca inaugurate discussions of automation and its effects on migrant farm workers.

Communication with Parents

Some parents wonder why college-type classes are given t children who are gifted and "will all go to college anyway." Bu many of the gifted do not go to college, and of those who do go many become disenchanted and quit. Those who go on to college should have valuable background for their advanced studies, but not to such a degree that they will lose motivation to learn later on when they are exposed to college material. And those who do not go on to college will at least have been exposed to the higher processes of learning.

Variety of Activities

Confining a group of children in a class to the use of only a textbook is self-defeating. Yet to have a classroom full of electronic equipment that is misused or unused serves no useful purpose. What is needed is a variety of activities designed to produce worthwhile results.

Chapter 2

Process of Scientific Research

Scientific research conducted by students in the seventh, eighth, and ninth grades differs primarily in emphasis.

Seventh Grade

Special research projects in the seventh grade should be informal and thus introductory to scientific ways of studying human behavior. For example, Tom wants to make a model of a pyramid for the class. He asks, "Do you want a special kind of model?" You answer, "Anything that is three-dimensional." He says, "I don't make things well with my hands." You answer, "You are not to be graded on artistic talent." Tom asks, "What will I be graded on?" You reply, "You will be graded on what you show you have learned about pyramids from your model."

Significant questions such as What should I make my model of? show that the research may be coming to a temporary end. To students who are kinesthetically gifted, the most important part of the project will be the model; to the teacher, however, the model should be least important. Tom might be right about not having an aptitude for building things, but he will have had more academic exposure than mechanical exposure.

Of course, little demand exists for pyramid builders, but a demand will always exist for people who can assume the responsibility for a project and carry it out to a successful conclusion. These abilities are concrete properties of successful research to which students need to be introduced. Tom's model might look more like the leaning tower of Pisa than like a pyramid, but in industry the final model would probably be crafted by skilled workmen supervised by men like Tom and designed by professionals more kinesthetically gifted than he.

Eighth Grade

Research projects conducted in the eighth grade may be much like those conducted in the seventh grade except that a more sophisticated level is attained. For example, a model of Stonehenge may be constructed. For success at this level, more analytical intellectual skills are required.

Whether each student should be given the same assignment or a different assignment depends on factors such as class size, availability

of research material, and individual interests and time. When studen have different projects, each student may present a five-minute or presentation, which helps students to become proficient in expres ing themselves orally. Moreover, an oral presentation helps others learn better and prevents boredom.

Ninth Grade

In the ninth grade, projects can be chosen similarly fro curriculum content, and the time allotment can be stretched over longer period.

Steps in Successful Research

In carrying out a research project, students should proce according to five important steps.

Step One: Logic

The first step to be taken is to devote a full week to the study formal logic. Students should learn to think clearly. Here is on suggested approach that a teacher may make for arriving at clarity thought: "We are going to study logic most of this week. Logic is th science of correct thinking. What do we mean when we say tha something is logical? I am going to write some numbers on the boar You try to figure out what logically follows. (The teacher writes o the board the numbers 22 33 44 55 ___ .) Bill, what goes into th blanks? Six? Why not seven? Of course, all problems in logic are no as simple as this one. Ice is cold, but dry ice can burn your hand Heat may be used for purpose of refrigeration. A person may laug until he cries or cry until he laughs."

Mistakes to be avoided. Mistakes in logical thinking may now b pointed out. These include the false analogy, the accidenta concomitance, and the unknown circumstance. An example of fals analogy is the belief that because a person has long fingers he shoul become a concert pianist. To attribute rain to the fact that one ha planned a picnic on that day is an example of accidental concomi tance. And the unknown circumstance is illustrated by the stor about the king of Siam who called the traveler from Holland a lia because the Hollander said that people in his homeland could wal on water part of the year. (The king had never seen or heard of ice so he could not believe it was possible to walk on water.) To b competent in evaluation skills, students must be aware of thes fallacies.

Inductive and deductive reasoning. The basic types of reasonin are inductive and deductive reasoning. Each works in almost opposit

ways. Inductive reasoning goes from specific instances to a general rule; deductive reasoning goes from the general rule to the explaining of specific instances. For example, a small child eating an apple discovers that the apple has a core. The next apple he eats also has a core, and the apple his sister eats has a core. Little by little he puts this information together and comes up with a general rule for all apples, which is that all apples have cores. He has gone from the observation of individual apples to a rule for all apples. This reasoning is an example of inductive logic. It also describes how students can derive concepts. The teacher should request students to develop their own examples.

Deductive logic goes the other way. If a child knows that all apples have cores, he can predict that another child eating an apple will find a core in the apple.

One of the most obvious uses of logical sequence is in outlining. A unit of study can be undertaken in which the mechanics of outlining are articulated in English class while the logic and sequence of outlining are taught in social science class.

Step Two: Research Paper

Step two deals with (1) specific qualifications; and (2) use of models.

Specific qualifications. This part deals with specific qualifications; i.e., topics, footnotes, and sources. It is important to discuss what a true topic is; a paper entitled "Evolution" certainly promises more than it can deliver. A good paper is *not* composed of opinions. Opinions have their place, but not in this type of research.

Use of models. One technique for teaching form in a research paper is the showing of models. The teacher should copy a sample page on a ditto for each member of the class as a reference form to follow in writing his paper.

A Sample Page

The most important thing to remember when assigned a research paper is to begin it promptly. Once done, half begun.[1]

Make sure that your work is well organized. Select a topic that is brief. Make a tentative outline at this point.[2] This is done to keep you from wandering off the subject. Philo Wartle has stated:

> I meant well when I began, but I neglected to make an outline. By the time I got to the end of the paper I was no longer writing about the original subject, . . . but it was too late to do the work over. I turned it in anyway. . . . I knew I could fool the teacher.[3]

"Find your references in the card catalog."[4]

Write down all of your sources.[5]

Don't use too many *ibids.*[6]

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[1]Daddy X. Warbucks, *How to Write Research Papers.* New York: The Matrix Co., 1968, p. 202.

[2]*Ibid.* p. 123.

[3]Philo Wartle, "How I Failed Anthropology," *Science Journal,* XI (February, 1967), 11.

[4]Warbucks, *op. cit.* pp. 12-15.

[5]Robert S. Miles, *Why Psychology Students Go Berserk.* Los Angeles: Neurotic Publishing Co., 1968, p. 118.

[6]*Ibid.*, p. 788.

The error in the second sentence of the sample just given should be pointed out. "Once done, half begun" is wrong. It should be "Once begun, half done." This error illustrates one of the many reasons for footnoting. If an "expert" is quoted and is wrong, it is his own fault, not that of the writer.

Step Three: Selection of Hypothesis

A method that has proved effective and practical for selecting a hypothesis and that teaches analytical skills at the same time is the following:

> For a group of ten, arrange five chairs in an inner circle and five in an outer circle. Arbitrarily divide the group. Tell them: "Inner circle, I am going to give you an idea to discuss. I will tell you what the topic is and give you about a minute to think it over. Then I will call on you one at a time. You will tell me whether you believe the statement to be true. Then you will give me your reasons. We will continue around the inner circle until everyone has contributed. Meanwhile, those in the outer circle will take notes. Then we will change places; the inner circle will become the outer circle and the outer circle becomes the inner circle."

The instructor should say very little. However, making a tape of the discussion is a good technique if students don't comprehend readily. The tape can be played back later with instructional comments or can be used for individual review.

Using hypothesis as a vehicle of a scientific inquiry requires teaching it first as a vocabulary word. Using hypothesis as a concept, the teacher can begin a lesson plan. Some hypotheses that children enjoy discussing are the following:

1. Personal cleanliness is a sign of intelligence.

2. Light-skinned people are more sensitive to pain than dark-skinned people.
3. People of different races can safely give blood transfusions to each other.
4. Basic IQ throughout the world is distributed on an even basis.
5. Every society considers its own culture to be best.
6. Civilized people are happier than uncivilized people.
7. Language is man's most valuable invention.
8. Man is human because he can reason.

Early Man (from the *Life* magazine series) offers many hidden hypotheses. The teacher should request three hypotheses of interest from each student and should provide each student with a 3 x 5 card on which to write them. As the cards are ready, each student can tack his own card to a bulletin board in the room. After the teacher reads the cards and writes comments on them, the actual research is ready to begin.

Step Four: Class Evaluation

When the finished papers are turned in, the teacher should give to each student the paper of another student together with a research evaluation sheet. The teacher using this approach may want to have each paper evaluated by several students before collecting everything, filling out his own evaluation sheet, and finally returning everything to the owner. A sample research evaluation sheet is given as follows:

Sample Research Evaluation Sheet

Name of author _____
Title of paper _____
Name of evaluator _____
Is the title a true topic? _____
Is there an outline or table of contents? _____
Does the paper follow the outline? _____
Rate the over-all form: Poor Good Excellent
Comment on ways to improve the paper: _____
_____
_____
_____

Step Five: Oral Presentation

Each student reports to the class on his work. At the conclusion of each presentation, questions are solicited from the audience. This procedure teaches synthesis and gives the student practice in fielding questions and thinking on his feet.

Communication of Research Hypotheses

A value-centered approach stresses the importance of applying classroom-acquired information to the outside world. Most students from upper middle class homes have often discussed hypotheses with their parents around the dinner table. On assignment these students can also discuss their hypotheses with their peers and with adults in the community. Disadvantaged or minority gifted children have usually not experienced such conversations.

Sample Questions

Questions are needed that (1) polish communication skills; (2) point out the importance of distinguishing fact from opinion; and (3) aid students in forming intrinsic values. Examples of such questions are the following:

1. Are individuals and societies the products of their cultures or are cultures the products of individuals and societies?
2. Do all human beings have the same basic needs? What are the basic needs? Is a car, in our society, a basic need? How are basic needs satisfied? How does environment fashion the way that people satisfy needs?
3. What do we mean by "uncivilized"? How can we explain that some uncivilized people have no jails because they have no crime? Why do civilized people need jails?
4. What are the subcultures in our society? What are the subcultures in other societies? When subcultures conflict, what must the individual do?
5. Are customs and beliefs learned or innate? How much of what one calls his conscience is a person born with?
6. What is there about culture that makes persons so slow to change their own society?
7. What is there about our own culture that makes us so slow to accept cultures much different from our own?
8. How does the lack of an effective language hinder animal societies? Are there human societies that are hindered by the lack of an effective language?
9. What is a superior culture? Contrast a superior culture with an inferior culture.
10. What characterizes the "American culture"? Can any parts of our culture be traced back to other cultures?
11. Are some people culturally behind others because certain races are more backward than others? What is a race?

Finding answers to these questions is not necessary; in some cases it is impossible. The thinking and inquiry involved are what is

important for the child's growth in the social sciences. Robert Frost once said that a good teacher is one who asks questions that he himself can't answer. If the truth were admitted, the best source of unanswerable questions is often the student himself.

Use of Film Preview Techniques

Techniques used to preview films can also be used to evaluate other forms of communication. When organized planning is followed, students learn to know concepts, to analyze relations, and to abstract meaning. First, it is advisable for the teacher to read any information that is distributed by the producer. The steps to be taken then are as follows:

1. Preview the film and take notes for later use.
2. Prepare the class. Discuss the topic (not the film plot) ahead of time.
3. Do not compel the students to take notes as they view the film.
4. Discuss the film with the class after it has been shown. Point out details that are important.
5. Show it again. This time stop the film from time to time. Go up to the screen and point out subtle details such as the expression on an actor's face or a significant prop in the setting.

Chapter 3

Applications of Research Skills

This chapter deals with sample applications of research skills. The method used is to begin inductively and end deductively.

Anthropology: Inductive Method

The Siriono Indians of Bolivia were studied for 18 months by Allan Holmberg, an anthropologist. He lived with these people to determine the relationship of the hunger drive to culture. He chose the Sirionos because of their constant struggle to survive in a land where economic scarcity prevails.

The teacher should initiate the case study with a lecture. After the lecture students should be given study sheets containing questions based on the lecture. Students are to fill in the answers on the study sheets. Additional questions that the teacher may wish to ask of the students are given as follows:

1. *Knowledge and convergent production.* Where is Bolivia? Can someone show it on the wall map? What is the altitude of the region in eastern Bolivia where the Sirionos live? How can altitude affect living conditions? Why are the Sirionos isolated from the civilized world?
2. *Analysis and evaluation.* What value is there to studying isolated tribes? Why is it important to know that Holmberg was the anthropologist who studied the Sirionos? When was his study made? Would there be any difference in the value of Holmberg's study if he had spent only two weeks among the Sirionos instead of 18 months? Although this study took place a number of years ago, is it still valid? Why or why not? What was the purpose of the study?
3. *Divergent production and synthesis.* What is a good definition for hunger? What is culture? Is there a relationship between hunger and culture? What is a biological drive? Can you give some examples? Are biological drives innate? Are they ever satisfied as long as the organism is alive? What is a psychological drive? Can psychological drives be satisfied permanently? Are they innate?

Other items that might appear on the study sheets given to the students are as follows:

Altitude?
Number of seasons?
What determines seasons?
How many inches of rainfall?
When is the rainy season?
Type of terrain?
Temperature?
Animal life?
Edible plants?
Average height and weight of Indians?
Color of skin?
Characteristics of hair?
Distinct facial characteristics?
Physical trademarks in general?
Population?
Social groupings?
Wars?
Marriage customs?
Leadership?
Family units?
Size of house?
Materials from which houses are made?
Furniture?
Degree of cooperation practiced by these people?
Use of materials found in their environment (plant fibers, clay, and so forth)?
Tools?
Weapons?
Clothes?
Decorations?
Use of fire?
Preparation of food?
Means of transportation?
Musical instruments?
Language?
Mythology?
Government?
Rhythm of activities?
Agriculture?
Hunting and fishing?
Ownership of property?

Preservation of foods?
Taboos?
Games and toys?
Marriage and divorce?
Health?
Problems of old age?
Death and burial?
Religion?

The reproduction of correct answers is, of course, an intellectual task of a lower level (convergent production), but it serves as a foundation for developing intellectual skills of a higher level.

Anthropology: Deductive Method

If the approach to the research is to become deductive, students will have to do library research to find another tribe or group of people to investigate for comparison. The teacher should discourage the use of only the encyclopedia and encourage the use of other sources like the *National Geographic* and sociological textbooks. The name of the new tribe being investigated is to become the topic for the deductive paper. Some of the information listed on the first study sheet will not be found for the people under investigation; on the other hand, information will be discovered that is not asked for. The teacher should discuss these possibilities and should encourage students to add whatever seems significant.

After a specified period of reading and notetaking, the group is brought back to a seminar. One student initiates the discussion by giving information about the tribe he investigated. He discusses one aspect of their society. A sample teacher-student exchange is as follows:

Teacher: "Bill, let's discuss religion first. What group did you study?"

Bill: "The Eskimos."

Teacher: "Tell us about their religion."

After Bill talks about religion among the Eskimos, Mary follows up by discussing religion in the tribe that she investigated. Everyone is limited to this one topic until all have reported. Group discussions follow in which comparisons are made, and both deductive and inductive reasoning is used to explain the differences.

Using this approach early in the first semester provides valuable background information and helps set standards for the inquiry process.

Psychology and Sociology

The making of lesson plans is not within the scope of this publication; however, several ideas are presented as stimulus questions or discussion starters. The curriculum areas are not divided by subject matter because of overlap; generally, however, they are drawn primarily from the fields of psychology and sociology.

Ontogeny and Phylogeny

The subjects discussed in the remainder of this chapter are divided into the headings of ontogeny and phylogeny. *Ontogeny* generally refers to the complete developmental history of an individual organism. *Phylogeny* generally refers to the complete developmental history of a race or group of animals. As applied here, the terms refer to the development of language. Where emphasis is placed on present development, ontogeny is used; where emphasis is placed on overall development, phylogeny is used.

Ontogeny

A. Problem: Does language change?
   1. *Gathering data*
      a. Get a book of Shakespeare's plays. Read several pages. Write down all words that are unfamiliar to you. Try to look these words up in an abridged dictionary. Try to estimate the percent of unfamiliar words in every 100 words you read.
      b. In the school library, get a copy of Chaucer's *Canterbury Tales.* Repeat the rating process.
      c. Do the same with *Beowulf.*
   2. *Evaluating data*
      a. Make a master list of unfamiliar words from each of the three sources.
      b. Discuss the reasons for some dictionaries having a "new word" section.
      c. Try to bring in an old dictionary. Look for differences between this dictionary and a recent one. Discuss compound words.
   3. *Selected references*

Beowulf. Translated by B. Raffel. New York: New American Library, Inc., 1963.

Chaucer, Geoffrey. *Canterbury Tales: An Interlinear Translation.* Woodbury, N.Y.: Barron's Educational Series, Inc., 1960.

Chaucer, Geoffrey. *Chaucer's Poetry: An Anthology for the Modern Reader.* New York: Ronald Press Company, 1958.

Shakespeare, William. *Complete Works.* Edited by C. J. Sisson. New York: Harper and Row Publishers, Inc., 1960.

Shakespeare, William. *Ten Plays.* Edited by Tyrone Guthrie. New York: Golden Press, Inc., 1962.

Weatherly, E. H., and Others. *The English Heritage.* Boston: Ginn & Company, 1945.

B. Problem: If language has changed, can we tell whether it is changing now?
   1. *Gathering data*
      a. Have students compile a master list of campus slang. As a homework assignment, have the students talk to their parents and make a list of the slang of their generation. Then have them talk to grandparents and to neighbors who are older than their parents. The students should make a master list of their parents' slang and grandparents' slang.
      b. Have many slang words survived over the last two or three generations? Why is slang used? Is slang language? Can any slang words be traced back to their origins? Do foreign languages contain slang?
      c. Have the class invent a list of slang words. Tell them to use the words with their friends. Obviously, the class must not divulge where the list came from or why it is being used. After a week or two, class members should be hearing their friends using some of these words. When this event occurs, what will the class have proved?
   2. *Selected references*

Dictionary of Slang and Unconventional English. Edited by Eric Partridge. New York: Macmillan Company, 1961.

Partridge, Eric. *Adventuring Among Words.* New York: Oxford University Press, Inc., 1961.

Partridge, Eric. *Slang Today and Yesterday.* New York: Macmillan Company, 1954.

C. Problem: Can punctuation marks change along with language?
   1. *Gathering data*
      a. An advertising executive has invented a new mark of end puncuation. It is called the interabang (or interobang). Its use is to terminate sentences that are half exclamation and half inquiry. Examples include *You don't say!* and *Who do you think you are?* The interabang's symbol is, appropriately enough, an exclamation point superimposed on a question mark.

b. Is this mark of punctuation needed?
c. Is there a mark of punctuation that is really unnecessary?
d. Can the history of any of our punctuation marks be traced?

2. *Selected reference*

"New Punctuation Mark Meets Need." *Globe Language Arts Bulletin,* XII (February, 1968), 1.

D. Problem: Can a language such as English be suddenly replaced by a different language?

1. *Gathering data*
   a. Almost 3,000 languages are in use in the world right now. Of the thirteen major languages, Chinese is spoken by 700 million, Russian by 130 million, and English by 250 million.
   b. Several world languages have been proposed. Among these are Esperanto and Interlingua. Are the major countries of the world likely to discard their present languages "in the interest of world peace" and take up a new language?
   c. What problems would be involved in such a change?
   d. What advantages would there be to such a change?
2. *Selected references*

Connor, G. A., and D. T. Connor. *Esperanto: The World Interlanguage.* New York: Thomas Yoseloff, Inc., 1959.

Gode, A., and Others. *Interlingua: A Grammar of the International Language.* New York: Frederick Ungar Publishing Co., Inc., 1963.

"Which Language?" *Parade,* December 15, 1968, p. 6.

E. Problem: Will breaking the code of dolphin "language" help us to understand the evolution of our own language?

1. *Gathering data*
   a. An animal that is raised in isolation normally develops sound patterns typical for his species. For example, dogs that have never heard another dog utter a sound of any kind still manage to bark. The same is not true for the human animal. Some ancients believed that a human raised in isolation would speak perfect Hebrew because it was man's "instinctive" language. But we know that if a human does not learn a language, he has none; the same is also true for dolphins.
   b. Do you have a pet?
   c. How does he communicate with you?
   d. Would you call his communication a language? Explain your answer.

   e. Has your dog ever said to you, "Hi, Mary. What are you going to give me for lunch today?"
   f. What would be the advantages of being able to talk with a dolphin?
   g. Why are scientists trying to decode what a dophin says instead of what a dog says?
   h. What determines the intelligence of an animal?
   i. What is the difference between knowledge and intelligence?
2. *Selected references*

Alpers, A. *Dolphins: The Myth and the Animal.* Boston: Houghton Mifflin Co., 1961.

Beasts, Brains, and Behavior. Edited by J. Wiley. New York: Scholastic Book Services, 1964.

Ruch, F. *Psychology and Life.* Glenview, Ill.: Scott Foresman & Co., 1963.

Phylogeny

A. Problem: Which came first, a written or spoken language?

1. *Gathering data*
   a. Which form of language did you use first?
   b. Do you know of anyone who first learned to write, then to speak?
   c. Explain the expression "frozen words."
   d. Find an alphabet in an encyclopedia that shows the evolution of the alphabet from Phoenician to Greek to Latin to English. Explain how the changes took place.
   e. Are there any letters in our alphabet that these other alphabets do not have?
   f. Are there letters in our alphabet that we can eliminate?
2. *Selected references*

Ernst, M. *Words: English Roots and How They Grew.* New York: Alfred A. Knopf, Inc., 1955.

Irwin, K. *The Romance of Writing: From Hieroglyphics to Modern Letters, Numbers, and Signs.* New York: Viking Press, Inc., 1957.

Lambert, E. *Our Language: The Story of the Words We Use.* New York: Lothrop, Lee, & Shepard Co., 1955.

Ogg, O. *The 26 Letters.* New York: Thomas Y. Crowell Company, 1948.

B. Problem: What makes us what we are?

1. *Gathering data*
   a. Have you ever heard anyone say about someone else, "He has no personality"?

b. Is it possible for a person to have no personality? Why or why not?
c. Find the origin of the word "personality." It comes from the Latin word *persona,* which means mask. We falsely think that a normal person is always the same. Each of us is many people. We continually put on masks of different kinds. Compare the mask worn in the classroom with the one worn at lunch. What kind of mask is put on when a mother asks a child for help with the dishes?
d. What scale can be used to rate someone's personality?
e. Is it possible for a person to be 100 percent good or bad? Give reasons for your answer.
f. Can we rate personality by looking at the face of the person being rated?
g. What does an honest person look like?
h. What does a dishonest person look like?
i. How does an honest person act?
j. How does a dishonest person act?
k. Bring in pictures for the class to rate for honesty.

2. *Selected references*

Hilgard, E., and R. Atkinson. *Introduction to Psychology.* New York: Harcourt, Brace & World, Inc., 1967.
Morgan, C., and R. King. *Introduction to Psychology.* New York: McGraw-Hill Book Company, 1966.
Munn, N. *Introduction to Psychology.* Boston: Houghton Mifflin Co., 1962.

C. Problem: Can personality be "read" by checking the location and size of bumps on a person's skull?

1. *Gathering data*

a. Do you think that the brain is the center of human control?
b. Do you think that different parts of the brain control different human functions?
c. Do you think that an excess of brain in one area is likely to make an individual show an increased sensitivity to that function?
d. Do you think that an excess of brain in one area is apt to make a bump in the skull?
e. Can you find a phrenologist's "map" of the skull? Bring it to class.
f. What has modern brain surgery proved or disproved about phrenology?
g. Are there phrenologists around today?

h. Why do you think some people go to phrenologists?
i. Name some other "sciences" like phrenology.

2. *Selected references*

Ellis, J. *Character Analysis: Subman or Superman?* Santa Ana, Calif.: Flagg, 1929.
Gibson, W., and L. Gibson. *The Complete Illustrated Book of the Psychic Sciences.* New York: Pocket Books, Inc., 1968.

D. Problem: What price has man paid for standing on his hind legs?

1. *Gathering data*

a. Man is the only quadruped that stands erect on the flat of his feet. (Gorillas stand erect only momentarily.)
b. Man's backbone has become vertical. It bends forward in the neck, backwards in the thoracic region, forward in the lumbar region, and backwards in the sacrum.
c. The spinal column is the first organ in man to age.
d. What back, leg, and foot problems does man fall victim to?
e. What are the advantages of walking upright?
f. What would be the advantages to a man of walking on "all fours"? Skeletal diagrams should be brought to class for comparison.

2. *Selected references*

Medawar, P. *Uniqueness of the Individual.* New York: Basic Books, Inc., 1957.
Montagu, Ashley. *Man: His First Million Years.* New York: New American Library, 1962.
Romer, A. S. "Major Steps in Vertebrate Evolution." *Science,* CLVIII (December, 1967), 1629.

Chapter 4

Development of Creativity: Field-Study Method

The social sciences offer a unique opportunity for developing creative approaches in interpersonal relationships. The field-study method, when used by students, has advantages as follows:

1. Places the student in a position of understanding other people's opinions
2. Develops sensitivity to other people's problems
3. Gives the student practice in communication skills
4. Trains the student in the art of inquiring
5. Exposes the student to nuances of meaning that will further his understanding of social behavior in general

Topics for Interviews

Topics for exploration in interview situations are as follows:

1. What are some good questions to ask around our school?

After making up a list of questions, the teacher should have the class members predict the number of yes and no answers they will get from polling 100 students. Then the class should be sent into the "field" to ask the questions. A specific number of interviews should be assigned to each student to keep the total around 100.

Do you think our percentages would be different if we polled 200 people? 300 people? 500 people?

Would polling more people tend to make our figures more or less reliable?

How carefully must we choose the people we interview?

2. What do you think is the difference between observation and introspection?

Which is more reliable?
Can you think of a third method?
Do you think people ever lie to themselves?
Why should anyone ever lie to himself?
Is there danger in lying to oneself?
Have you ever lied to yourself?

Is daydreaming a form of lying to oneself?
Is a lie always bad?

3. How would you compare instinct in man and in lower animals?

If an animal is raised with humans, he remains an animal. If a human is raised with animals, is he an animal? Why?

If a child touches a hot stove, he will never touch a hot stove again. If a monkey touches a hot stove, he will never touch any stove again.

4. Some psychologists think that the human animal may enjoy torturing himself to a slight extent. What do you think?

How amusing are amusement parks?

Alcoholic beverages may give the user a hangover. Do you think some people drink to get a hangover?

Do you think that bad-tasting medicine is more popular than good-tasting medicine?

If an antiseptic "burns," is it really doing its job?

5. There is nothing good or bad; thinking makes it so.

What do you think this statement means?
Is nothing really good or bad?
Should there be censorship?
If so, who will be the censor?
What sort of thing will we censor? Why?

Topics for the Classroom

In the opening section of this publication, a definition of social sciences was given: "Social sciences are [those sciences] concerned with the detailed, systematic, and theoretical study of human relationships." The disciplines that give major emphasis to the study of humanity are psychology (concerned with the individual); sociology (concerned with the grouping of humanity); and anthropology (concerned with the beginnings of man's acculturation). Gifted children in junior high school need to probe these disciplines more than the average child would.

The topics suggested in this section are only a few of many that can be used by the teacher to initiate gifted students into the broad coverage of psychology, sociology, and anthropology. These topics are given as follows:

1. How many ages do you have?

Ages are almost always given chronologically. The teacher should explain that persons have many ages. Chronological age is probably the least important of all.

2. *If you were put in charge of training men or animals, would you prefer to use reward or punishment?*

   Could you use them in combination?
   If you did use them in combination, which would you start with?
   Does society use reward or punishment more often?
   Bring to class three pages of a newspaper. Mark examples of reward and punishment.
   If a policeman stops your father's car, is he more likely to apply reward or punishment? Why? What is the policeman's job?
   What should you do if you think the policeman has treated you unjustly?
   How would our lives be different if there were no policemen?

3. *Should an unjust law be obeyed?*

   What makes a law unjust?
   Can you think of an example of an unjust law?
   Do you think that a curfew is unjust?
   What can we do about unjust laws?
   What is justice?

4. *Consider the school to be a city in miniature.*

   What roles are played by the principal, teachers, and students?
   Make a sociogram of the student body. Include such headings as socialites, hangers-on, hoodlums, and so forth. Which groups do your lines connect?
   How does the school as a city compare with a primitive tribe already studied?

5. *Can you make a distinction between "upper class" and "lower class" in a society?*

   Can yearly income be a criterion?
   Can attitude toward society be a criterion?
   Can the type of work done by the head of the household be a criterion?
   If these classifications exist, is it possible to move from one class to another? If so, how?
   Is education a criterion?
   If combinations of criteria are needed to identify a person as belonging to the upper or lower class, what would the most likely combinations be?

6. *Trace man's recreational activity from ancient times to the present.*

   Are there any similarities between past and present?
   Do you see any general improvement?
   Do the amusements of a civilization reveal anything about its morals or state of decay?
   Do you think boxing and wrestling are moral amusements? Are they now more moral than they once were?
   What is your opinion of bullfighting?

7. *Do plants and animals adapt themselves to their environment by changing structurally?*

   If you think they do, what authorities can you quote?
   If you don't think they do, what authorities can you quote?
   What argument can you muster for either view?

8. *Man attempts to solve his problems by means of devices he invents called folkways.*

   One folkway is shaking hands. Why do we shake hands?
   Another folkway is having the man work and the woman stay home (usually). Is this folkway changing? Do folkways change? Why?
   How many folkways can you list?
   Can you find folkways in other societies somewhat like our own?
   How many of our folkways can you trace back to their origins?
   Do you think that folkways have helped man to solve problems?
   Can you think of any problems man has raised by his use of folkways?
   What are emotional age, social age, and mental age?
   What other ages does a person have?
   How can these ages be measured in others?
   How can we measure these ages in ourselves?
   Can a junior high school student have an emotional age of five? What would happen if he did?
   What advantage is there to discovering our various ages?

9. *How do societies decide who gets what?*

   Do all societies use the same method?
   Research and contrast unlike societies.
   Is service to society a criterion for reward?
   What other criteria can you think of?

10. How are decisions made in primitive or tribal societies?

Who enforces decisions?
What types of punishment are used for transgressors?
What types of rewards are given to those who do not transgress?
Do you think capital punishment is civilized? Why or why not?

11. Are we born with inbred pugnacity?

If pugnacity is not inbred, how can we survive in a competitive world?
If pugnacity is inbred, does this mean that war is inevitable?

12. An ancient philosopher said that luxury causes war. Do you agree?

What is luxury?
Is your father's car a luxury?
Is luxury inevitable?
Do you have possessions that you consider to be luxuries?
Do civilized countries fight more wars than do uncivilized countries? What reasons can you give for your answer?

13. Most sociologists say that man has always lived in groups.

Do you agree with this statement?
What reasons does man have for living in groups?
Can nature, as an enemy, be resisted better by groups of men than by a man alone?
What disadvantages are there to living in groups?
What do you think the first groups consisted of?
Compare groups in primitive societies with our own.
What groups do we have within our own society?

14. It has been said that of all the animals in the world, man is the only one who can change his environment to suit himself, and yet he is the only maladjusted animal.

Do you believe this statement to be true? Give reasons for your answer.
Name some ways in which man has changed his environment.
When man changes his environment, does he always do it for the better?
Make a list of man's environmental changes that have been for the better. For the worse.
If certain animals could change their environments, what do you think they would do?

What would be the advantages and disadvantages of man's taking over control of the weather?
If man could take over control of certain physical functions of the solar system (such as planet rotation and revolution), would this power be good or bad? Give your reasons.

15. Petrified ant hills show that millions of years ago ants acted precisely as they do now. Over the years, however, man has continually changed his behavior.

Can you give reasons why the above statement is true?
Do you think man will continue to change in the future? How?
Do you think ants will change? If so, how?
What kinds of things can make animals change their behavior?
What kinds of things make you change your behavior?
What do you call a change of behavior?

16. How many societies are you a member of?

What identifies a society?
What kinds of things affect society?
What does society affect?

17. Man has great need for security, but he also has need for adventure.

Do these needs run contrary to each other? If they do, how can they be present at the same time in the same individual?
Give examples from your own life.
Do you think that some people need security more than others?
Do you think that some people need adventure more than others?
What are the advantages of being more rather than less adventurous, and vice versa?
Have you ever been homesick?
What do you think causes homesickness?
What influence does a person's age have on his need for security and adventure?
What influence does a person's environment have on his need for security and adventure?

18. Einstein once said that if his ideas turned out to be good, the Germans would say he was German, and that if they turned out to be bad, they would say he was Jewish.

What did he mean?

Einstein spent the last years of his life in the United States. Would you say he was German or American?

Make a list of people who were born elsewhere but came to the United States. List their accomplishments.

Can you find the names of Americans who left this country to take up citizenship elsewhere? What reasons did they give for leaving?

Why do so many persons come to this country but so few leave?

Write the name of a country in which you would like to take up residence. Then study about that country.

19. *The meeting of the Indian and the white man is often regarded as one of the great tragedies of history because no two races have understood each other less.*

Do you think the Indian or white man was right? (Debate.)

Does a superior culture have the right to destroy an inferior culture?

Was the Indian culture inferior?

What reasons did the white man have for coming here?

How has Indian culture affected our own culture?

Contrast the treatment of Indians in the United States with the treatment of those in Mexico.

What has happened to the Indians of Japan?

20. *Recently, natives on a Pacific island raised money to buy our President from us. These natives remembered that during World War II American soldiers had arrived with thousands of tons of supplies. The islanders thought that buying our President would bring them more supplies.*

Do you think that the islanders would give our President god-like status?

Do you think that you could diplomatically explain to the natives why they may not purchase our President? Give some reasons.

21. *Discuss the "great man theory." Does history make great men or do great men make history?*

Would Washington and Lincoln fulfill their roles in history (in a modified way, of course) if they were living today? Or, if the political situation today did not call upon their special talents, would they lead quiet lives like the majority of the rest of us and never be heard from?

Do you agree with the historian who said that if Hitler were alive today in a nation that has the hydrogen bomb, the world would be destroyed?

22. *How can poor communication endanger relations between different groups of people?*

The Boxer Rebellion began when foreigners in China built towers, not realizing that the Chinese believed that the spirits of the dead flew low. The towers, they reasoned, would interfere with the flight of the spirits.

The Maori cut down a flagpole flying the union jack. The British felt this action to be justification for war, not realizing that it was Maori custom to cut down a pole during a dispute. This action simply meant that the Maori were ready to discuss the problem. The British couldn't understand why the Maori would provoke them by cutting down their flag. The Maori couldn't understand why the British would attack them when they showed a willingness to communicate.

23. *When classes were asked to predict how life would be different in future years, they found the following predictions made by architect Norman Bel Geddes in 1931. These changes were to have taken place in ten years, or by 1941.*

There will be double-deck streets, divided into lanes for slow stop-off traffic and lanes for express traffic.

Synthetic materials will replace natural materials used in the construction of buildings.

Every roof will have a garden.

Houses in all climates will have flat roofs.

The garage will become part of the house and will be placed on the street front.

Airplanes will land and take off vertically.

Generally speaking, houses will be smaller, but rooms will be larger.

Mechanical devices will open doors, serve meals, and remove dirty dishes and clothing to the appropriate departments in the building.

Talking pictures will replace talking professors.

Aircraft will attain speeds up to six miles a minute.

A combination dictaphone and typewriter will replace stenographers.

Events of national interest will be available by television simultaneously with their occurrence.

There will be no epidemics.

There will be no incurable diseases.
The working week will consist of four six-hour days.[1]
How many of these predictions would you say have come completely true? Partially true?
Would you say that the most important predictions have come true?
In some cases, how much have we progressed past the prediction, such as in the case of airplane speed?
Do you think that epidemics will ever be eradicated?

24. *When classes were asked to predict how life would be by the year 2,000 they assembled the following predictions:*

Cars will be powered by electricity.
Boston through Washington, D.C., will be one city, as will San Francisco through San Diego.
Cities and farms will be located beneath the sea.
Watches will be nothing more than miniature television receivers.
Television will be three-dimensional and will cover the entire front wall of a room.
Weather will be controlled, and certain cities will be completely encased by plastic domes.
Many of the present deserts will be productive farm areas.
Transplants of human, animal, and artificial organs will keep people alive until they just "wear out."
A pill to make people smarter will be widely used.
A cup of coffee will cost 50 cents.
The average work week will consist of 22 hours, the average vacation will be 26 weeks, and the average retirement age will be 38.
Students will be taught at home by telephone, television, and computer.
With six billion people on earth, we will be eating foods that most of us would not consider edible today; i.e., seaweed, algae, and so forth.
There will be fish farms.
Parking spaces might be hereditary.
How many of these predictions do you think are likely to come true?
How would a six-months' vacation for your parents affect you?

[1] D. Gordon and V. King, *College Readings on Today and Its Problems.* New York: Oxford University Press, Inc., 1933, p.3.

Can you think of any disadvantages to being taught by a computer?
In a food shortage, do you think you could eat eel, rattlesnake, ants, or grasshoppers?
What determines our taste in food?
Go to a supermarket and make a list of the exotic foods sold there.

25. *Imagine that the year is A.D. 2300. The class is made up of a team of archaeologists. You are digging on the site of where the school once stood.*

How much of the ruins would be above ground, if any?
Where does the debris come from that covers ruins?
In how many ways could the school have been destroyed?
What parts of the school are apt to be preserved? Lockers? Walls? Books? Notebooks?
Are we apt to recognize a pencil sharpener if we dig it out of the ruins?
What artifacts are we apt to find that will tell us this was a school?
Imagine we find the foundations of the walls. Draw a floor plan of the school.
Would it help archaeologists if a time capsule were left behind? If we were to bury a time capsule now for archaeologists to find in 500 years, which of the following items would be most representative of our lives today?

A set of textbooks
Blackboard and chalk
Pencils and pens
A grade book
An annual
A copy of the cafeteria menu
A diary kept by the gifted class
A map of the school grounds
A set of rules and regulations for the school
Records of the alma mater (or tapes)
Records of a typical class session.

Imagine you are going to leave such a time capsule.
Can the class begin keeping a diary?
What items are important enough to put into such a diary?
If you were taking pictures of events to include in the capsule, what events would you record?

The large number of topics in this chapter is presented so that teachers may have a wide selection of topics likely to stimulate creativity, analyses, and evaluation. The topics may be used for reporting, newspaper articles, debates, and plays.

Selected References

Books for Students

Nonfiction

Andrews, R. *Meet Your Ancestors: A Biography of Primitive Man.* New York: Viking Press, Inc., 1945.
Presents data, taken from actual specimens, about the physical development, home life, and environment of primitive man.

Baldwin, G. *The Riddle of the Past: How Archaeological Detectives Solve Prehistoric Puzzles.* New York: W. W. Norton & Company, 1965.
Describes in clear, interesting detail the work of the archaeologist in locating a site, organizing and conducting the excavation, and studying and identifying the find.

Benedict, R. *Patterns of Culture.* Boston: Houghton Mifflin Co., 1934.
Comparative study of different cultures through which "we can see our own socially transmitted customary behavior set beside that of the other and strangely different peoples."

Brown, L. *This Believing World: A Simple Account of the Great Religions of Mankind.* New York: Macmillan Company, 1944.
A popular work on comparative religion. Traces the growth of religious faith from earliest times to the rise and spread of the great religions. Covers a vast field and is most readable.

Chase, S. *Guide to Straight Thinking.* New York: Harper & Row Publishers, Inc., 1956.
Explains the principles of logic and describes the 13 common fallacies to which all are prone, together with their use as propaganda techniques. Chase believes that straight thinking calls for "common sense, lining up the facts, and figuring out what they mean and how best to react to them."

Cheney, S. *A New World History of Art.* New York: Viking Press, Inc., 1962.
Comprehensive work on art from prehistoric times to the present. Good for reports rather than for reading of the whole book.

Driver, H. *Indians of North America.* Chicago: University of Chicago Press, 1961.
Comprehensive and comparative description and interpretation of native American cultures from the Arctic to Panama.

Halacy, D. *Nine Roads to Tomorrow: Dramatic Developments in Scientific Technology.* Philadelphia: Macrae Smith Co., 1964.
Easy to read. Covers the laser, Comsat, electronic computers, biopower, the solar battery, ultrasonics, ground-effect machines, and bionics.

Hall, E. *The Silent Language: Communication Without Speech.* Garden City, N.Y.: Doubleday & Co., Inc., 1961.
Points out difficulty people have in communicating with one another. Defines *culture* as various concepts of people's readiness to act.

Hayakawa, S. I. *Symbol, Status, and Personality.* New York: Harcourt, Brace & World, Inc., 1963.
Readable book especially valuable for stimulating discussions. Emphasis is on semantics, which helps to make human beings human.

Hook, L. *The Research Paper: Gathering Library Material, Organizing, and Preparing the Manuscript.* New York: Prentice-Hall, Inc., 1962.
Very practical little booklet. Has an index and explains the use of all types of library tools. Gives many examples.

Jacker, C. *Man, Memory, and Machines: An Introduction to Cybernetics.* New York: Macmillan Company, 1964.
Interesting treatise covering (1) cybernetics, brains, and computers; and (2) background of cybernetics and bionics.

Packard, V. *The Hidden Persuaders.* New York: David McKay Co., Inc., 1957.
Revelation of influences that change cultural patterns; e.g., advertising, public relations, and the like.

Palmer, G. *Quest for the Dead Sea Scrolls.* New York: John Day Company, 1965.
Story of the Dead Sea scrolls from their discovery in 1947 to their final purchase by the Palestine Archaeological Museum in the old part of Jerusalem.

Patterns for Modern Living. Chicago: The Delphian Society, 1958.
Volume three of the series contains an account of the Siriono Indians by Allan R. Holmberg.

Pei, M. *Language for Everybody: What It Is and How To Master It.* New York: Devin-Adair Co., 1956.
Introduction to all the languages of the world, past and present, with emphasis on the world's 100 most important languages. Tells what language is, what part it plays in our everyday lives, how to improve our own written and spoken tongue, and how to save time and energy in learning the most useful foreign languages.

Ruchlis, H. *Clear Thinking.* New York: Harper & Row Publishers, Inc., 1962.
Offers an informal introduction to sound reasoning. Discusses superstition versus scientific fact, deductive and inductive reasoning, and the role of language in the reasoning process.

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About a Jewish girl sent with her family to a German concentration camp during World War II. She spends about seven years of her life in different camps.

Bonham, F. *Durango Street.* New York: E. P. Dutton & Co., Inc., 1965.
Convincing novel of life in an impoverished Negro ghetto. Rufus Henry, a sixteen-year-old Negro just out of a prison forestry camp on parole, finds it impossible to protect himself from a gang unless he joins an enemy gang and thereby violates his parole.

Canaway, W. *Find the Boy.* New York: Viking Press, Inc., 1961.
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Chase, M. *The Lovely Ambition.* New York: W. W. Norton & Company, 1960.
Fine, humorous, moving novel with setting divided between England and Maine. Comparisons of customs and the times are delightful.

Frank, P. *Alas, Babylon.* Philadelphia: J. B. Lippincott Company, 1959.
Adventure tale of Americans starting life over from scratch after their town has narrowly escaped nuclear bombing. Unhurt but threatened from all sides, they find themselves back where their pioneer ancestors had been.

Godden, R. *An Episode of Sparrows.* New York: Viking Press, Inc., 1955.
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Hyde, C. *Temple of the Winds.* Cleveland: World Publishing Co., 1965.
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An education in prairie life and Indian ways was in store for the William Chapman family when they took charge of an Episcopal school on a reservation in South Dakota.

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Now living in America, the author gives a refreshing, authentic description of recent life in China based on her own experiences. Very important autobiography.

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Authoritative compendium in the field.

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For current English in the United States. Also includes British usage, answers questions of grammar, word preferences, style, punctuation, idioms, spelling, and similar problems.

Fowler, H. *A Dictionary of Modern English Usage.* New York: Oxford University Press, Inc., 1937.
Manual in dictionary form for cultivated writer or speaker. Does not include information for the uneducated.

Gateway to the Great Books. Edited by R. Hutchins. In ten volumes. Chicago: Encyclopaedia Britannica, Inc., 1963.
Contains selections of outstanding creations of the human mind. Each of the works in this collection is a masterpiece of the imagination and intellect of man.

Hamlyn, P. *Larousse Encyclopedia of Mythology.* New York: G. P. Putnam's Sons, 1959.
Illustrated compendium of world mythology including prehistoric, Egyptian, Assyro-Babylonian, Roman, Celtic, Teutonic, Persian, Indian, Chinese, Japanese, African, and American mythology. Comprehensive and very readable.

The Horizon Book of Lost Worlds. New York: Harper & Row Publishers, Inc., 1962.
Beautifully illustrated, easily read discussion of lost civilizations, including Egyptians, Mesopotamians, Indus Valley people, Minoans, Mycenaeans. people of Anatolia, Etruscans, Khmers, and Maya.

Masterpieces of World Philosophy in Summary Form. Edited by F. Magill. New York: Harper & Row Publishers, Inc., 1961.
Not easy reading, but challenging. Its use is limited to reference and reports.

The Doubleday Pictorial Library of World History. Edited by A. Bullock. New York: Doubleday & Co., Inc., 1962.
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